

CLAIMS

This Listing of Claims replaces all prior versions of Claims in the subject application.

1. (Previously presented) A method of producing resistant starch comprising:
 - (a) selecting a reaction temperature of 140°C to 180°C;
 - (b) acidifying unmodified starch to a selected pH of about 1 to about 4 with hydrochloric acid, wherein said selected pH is optimum to convert said unmodified starch to resistant starch when at said reaction temperature;
 - (c) heating said acidified unmodified starch to said reaction temperature; and
 - (d) maintaining said acidified unmodified starch close to said reaction temperature until a maximized yield of resistant starch has been obtained while maintaining a whiteness level of at least 65.
2. (Canceled)
3. (Original) The method of claim 1, wherein said unmodified starch of step (b) is acidified with aqueous hydrochloric acid.
4. (Original) The method of claim 1, wherein said unmodified starch of step (b) is acidified with gaseous hydrochloric acid.
5. (Canceled)
6. (Original) The method of claim 1, wherein said optimal pH of acidified unmodified starch of step (b) is between about 2 and about 3.
7. (Original) The method of claim 1, wherein said optimal pH of acidified unmodified starch of step (b) is about 2.4.

8. (Canceled)

9. (Previously presented) The method of claim 1, wherein said reaction temperature is between 160°C and 175°C.

10. (Previously presented) The method of claim 1, wherein said reaction temperature is 170°C.

11. (Canceled)

12. (Canceled)

13. (Previously presented) The method of claim 1, wherein a moisture content of said unmodified starch is between about 2% and about 6%.

14. (Previously presented) The method of claim 1, wherein said unmodified starch is acidified before a moisture content is reduced to between about 2% and about 6%.

15. (Previously presented) The method of claim 1, wherein said maximized yield of said resistant starch is greater than about 50%.

16. (Previously presented) The method of claim 1, wherein said maximized yield of said resistant starch is greater than about 60%.

17. (Canceled)

18. (Previously presented) The method of claim 1, wherein:
 said reaction temperature is between 160°C and 175°C; and
 said pH is between about 2 and about 3.

19. (Previously presented) The method of claim 1, wherein:
 said reaction temperature is 170°C; and
 said pH is about 2.4.
20. (Previously presented) The method of claim 1, wherein:
 said starch has a moisture content of about 4% and is acidified with
gaseous hydrochloric acid to a pH of about 2.4; and
 said reaction temperature is 160°C.
21. (Previously presented) The method of claim 1, wherein said unmodified
starch is derived from corn.
22. (Previously presented) The method of claim 1, wherein said unmodified
starch is derived from potatoes, rice, casava, or wheat.
23. (Previously presented) The method of claim 1, further comprising:
 (e) manufacturing a food product from said resistant starch.
24. (Previously presented) A method of producing resistant starch comprising:
 (a) acidifying unmodified starch to a pH of about 1 to about 4 and a
reaction temperature of 140°C to 180°C with hydrochloric acid, wherein said pH is
selected relative to said reaction temperature such that said pH may be optimum
thereto to convert said unmodified starch to resistant starch when at said reaction
temperature;
 (b) heating said acidified unmodified starch to said reaction
temperature; and
 (c) maintaining said acidified unmodified starch close to said reaction
temperature such that a maximized yield of resistant starch may be obtained while
maintaining a whiteness level of at least 65.

25. (Canceled)

26. (Previously presented) The method of claim 24, wherein said maximized yield of resistant starch of step (c) is obtained while maintaining a whiteness level of at least 65.

27. (Previously presented) A resistant starch formed from a process comprising:

(a) acidifying unmodified starch to a pH of about 1 to about 4 and a reaction temperature of 140°C to 180°C with hydrochloric acid, wherein said pH is selected relative to said reaction temperature such that said pH may be optimum thereto to convert said unmodified starch to resistant starch when at said reaction temperature;

(b) heating said acidified unmodified starch to said reaction temperature; and

(c) maintaining said acidified unmodified starch close to said reaction temperature such that a maximized yield of resistant starch may be obtained while maintaining a whiteness level of at least 65.